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United States Coast Guard

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16711
MOC Policy
Ltr No. 3-98
5 March 1998

From: Commandant
To: Distribution

Subj: DRYDOCK EXTENSIONS FOR CERTAIN PASSENGER VESSELS

Ref: (a) Navigation and Vessel Inspection Circular (NVIC) 1-89
(b) Marine Safety Manual (COMDTINST M16000.7) Vol. II, Chap. 8.A.4
(c) Title 46 CFR 71.50-36(f), 115.670, and 176.670

1. PURPOSE. This policy letter modifies our drydock extension policy for passenger vessels that operate exclusively in benign environments. Upon completion of a comprehensive hull survey process, as outlined in enclosure (1), these "low-risk" passenger vessels may obtain a drydock extension of up to 30 months. This short-term policy will satisfy the needs of a major segment of the passenger vessel industry while ensuring their safe operation. Additionally, the extension period given by this policy will enable the Coast Guard to reevaluate the hull examination regulations that apply to all passenger vessels.

2. BACKGROUND. The impetus for this policy revision arose from concerns expressed by passenger vessel operators faced with unique operational conditions. Some passenger vessels must transit over 1000 river miles to find a drydock facility to accommodate them while others, because they are land-locked, would have to build a drydock on site to satisfy Coast Guard hull examination requirements. The majority of the vessels faced with this problem are operated in benign, low-risk environments; i.e. fresh water (less corrosion risk), near-shore and/or shallow water, mud-bottom rivers, limited routes, and limited time underway.

3. DISCUSSION. Although these operational constraints were given some consideration, the rationale for revising our drydock extension policy was based on our resolve to address industry concerns through risk analysis while remaining within our regulatory authority. Specifically, the primary deciding factors were the benign operating environments for these vessels and technological advances in underwater survey techniques. Vessels meeting the criteria of enclosure (1) face a much lower level of risk when compared to their counterparts operating in salt-water and on extended routes and voyages. These factors, coupled with the stringent survey criteria set forth in this policy letter, enable the Coast Guard to consider drydock extensions well beyond the traditional one-year limit. The survey criteria, when properly followed, provide for a general assessment of a vessel's hull condition, making it safe and reasonable to allow drydock extensions of up to 30 months.

4. IMPLEMENTATION.

a. Officers-in-Charge, Marine Inspection (OCMI) shall ensure strict compliance with the criteria set forth in this policy. OCMIs should also bring this guidance to the attention of appropriate individuals in the passenger vessel industry within their zones.

b. U.S. passenger vessel owners and operators are encouraged to review the guidance contained in enclosure (1) and consider whether this program is viable for their particular passenger vessel. Requests for drydock extensions under this program should be made to the cognizant OCMI.

5. ACTION. This policy guidance is effective immediately and will be canceled upon completion of a future rulemaking project to update the passenger vessel drydocking regulations. At that time, it will be incorporated into a future change to the Marine Safety Manual, Vol. II.

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J. E. SCHRINNER
By direction

Encl: (1) Special Drydock Extension Survey Criteria

Dist: All G-M Division Offices
All District (m) Offices
Marine Safety Center
Marine Safety School
USCG/ABS Liaison Officer
USCG/MSC Liaison Officer

SPECIAL DRYDOCK EXTENSION SURVEY CRITERIA

Drydock extensions of up to 30-months are available to inland passenger vessels that operate in a benign environment, on restricted routes, upon successful completion of a special drydock extension survey. The survey criteria outlined below is similar to the traditional underwater survey program presented in NVIC 1-89 with exception that it is more detailed and comprehensive.

1. Eligibility Criteria.

- The following criteria shall be met for any passenger vessel (inspected under 46 CFR Subchapter H, K, or T) requesting a drydock extension beyond one year:
  - The vessel must be constructed of steel or aluminum. Wood and FRP hulls are excluded from eligibility.
  - The vessel must have operated exclusively in fresh water since its last drydock examination. To further clarify, this means year-round operation in fresh water.
  - Vessel operation must be restricted to rivers or protected lakes. This restriction must be indicated on the vessel's Certificate of Inspection. The definition of a protected lake will be left to OCMI discretion.
  - The vessel must operate exclusively in shallow water or within 0.5 NM from shore. For shallow water operation, the maximum water depth may be defined as the depth at which, if the vessel sinks, the uppermost deck(s) that could safely accommodate all passengers and crew remains above water. To make this determination, vessel stability (passenger heeling moment) must be considered.
  - **NOTE**: Water clarity is not included as a condition of eligibility. If water clarity is a problem, then the use of a "clear box" of at least 18 inches in diameter must be used for the underwater video.

- The cognizant OCMI will determine eligibility for drydock extensions. In addition to the above criteria, decisions of acceptability will be based on:
  - The overall condition of the vessel (based on inspection history) and the hull protection system (cathodic protection is required as a minimum).
  - The vessel's history of casualties involving the hull and other hull-related deficiencies.
  - Review of the written extension request (see Section 2 below for details).
  - **NOTE**: Although a vessel age limitation has not been included as a criterion, the OCMI shall consider the impact of vessel age on the overall condition of the hull when determining vessel eligibility.

- Unlike the traditional underwater survey program, a pre-survey drydocking is not required. Permanent hull markings, hinged sea chest grates, and reference videos are optional.

2. Drydock Extension Applications. The information required for the drydock extension application is identical to the requirements for the traditional underwater survey program (see Section 2 of Encl. (1) to NVIC 1-89) with the following exceptions:

   - Hull Maintenance and Condition Assessment Program. The extension request must include a hull maintenance and condition assessment program which shall, as a minimum, contain the following:

     - A preventative maintenance plan for the vessel's hull and related systems/equipment. A preventative maintenance plan should consider the following:
       - Inspection and replacement (as needed) of zinc anodes
       - Inspection and cleaning (as needed) of the underwater hull
       - Inspection and maintenance of rudder and shaft seals
       - Inspection and operational testing of sea valves
       - Flushing of sea chests and sea strainers

     - Provisions for an annual condition assessment of the hull in the presence of a third party examiner. The third party examiner should be a qualified marine surveyor (recognized by a national marine surveyor association) or have prior experience as a Coast Guard marine inspector or classification society surveyor. As a minimum, the third-party examiner should have at least three years experience in the examination of steel or aluminum-hulled vessels. The OCMI shall have the discretionary authority to accept or deny the use of a particular third party examiner and may, as an option, require the presence of a marine inspector. The condition assessment plan should include the following:

       - Evaluation of the vessel's underwater hull and appurtenances (using qualified divers and appropriate video equipment). This will be done primarily to verify that hull coatings remain intact and to check for fouling of hull appurtenances. This can also be used as an opportunity for preventative maintenance.
       - Hull gaugings (representative sampling) of suspect areas.
       - A mechanism for providing a written hull assessment and preventative maintenance report or checklist to the cognizant OCMI on an annual basis.

   - Internal Structural Examination. A thorough ISE shall be conducted during the survey. All internal spaces shall be made accessible for examination and gas-freed as appropriate. However, integral fuel oil tanks shall be examined as required by MSM, Volume II, Chapter 8.B.5. and by 46 CFR 71.53, 115.610, or 176.610 (as applicable).

   - Vessels of 15 Years of Age or Older. Vessels 15 years of age or older are eligible for drydock extensions under this policy.

3. Preparatory Meeting. Before conducting the drydock extension survey, a preparatory meeting shall be held. See Section 4 of Encl. (1) to NVIC 1-89 for details.

4. Survey Criteria. The drydock extension survey shall be conducted in accordance with Section 5 of Encl (1) to NVIC 1-89, with the following additions or modifications:

   ◊ Duration of the Drydock Extension Survey. The survey should take as long as the inspector considers necessary to ensure that the ship is in a safe condition to continue operation for the next 30 months. At least five days should be allowed to conduct the examination. However, with use of a third party examiner, the marine inspector's time on-site may be reduced. With the exception of those portions of the survey that require marine inspector presence, the duration and scope of participation by a marine inspector shall be subject to OCMI discretion.

   ◊ Site Selection. The site must be in an area with sufficient water depth under the keel and sufficient clearance adjacent to both sides of the vessel to allow the diver to safely survey the entire underwater hull of the ship. Current velocity must be minimal to ensure diver safety. If air temperatures are below freezing, dive equipment must be designed for use in sub-freezing conditions. Diving should not take place when ice exists on the water surface. **NOTE**: Water clarity is not a great concern because use of a "clear box" will enable a clear, albeit limited, view of the hull regardless of water conditions.

   ◊ Hull Markings. If permanent hull markings as required by NVIC 1-89 are not in place, a temporary underwater grid system shall be used. The temporary grid system shall consist of stainless or galvanized steel cables, spaced not more than 10 feet apart, with sequentially numbered tags spaced at one-foot intervals. The grid system shall remain in place during the entire survey.

   ◊ Preliminary Examination. Prior to holding the preparatory meeting as noted in Section 3 above, a third-party examiner (acceptable to the OCMI) together with qualified divers shall conduct a preliminary examination of the hull. The preliminary examination shall be used to assess the overall condition of the vessel hull and identify specific concerns that should be addressed. A marine inspector need not be present during this portion of the survey process.

   ◊ Underwater Inspection.

      ◊ A complete underwater hull examination (as defined below) shall be supervised by the third-party examiner and recorded on videotape. The third-party examiner will identify areas requiring further examination by a marine inspector. The videotape will be indexed to enable the marine inspector to readily identify and review important sections of the tape.

      ◊ As a minimum, the underwater survey shall include a general examination of the hull plating and a detailed examination of all hull welds, propeller, rudder, other hull appurtenances, sea chests, and sea valves. As a guide, examination of the hull plating should cover all welds and at least five points on each plate, evenly spaced, where ultrasonic gaugings will be taken. The plugging of sea

chests and gauging of rudder and tailshaft bearings shall also be recorded on videotape. The attending marine inspector may require a detailed examination of other areas of the hull as deemed necessary.

- ◊ In addition to the above gaugings, divers shall take belt gaugings at the bow, stern, and midships and along the wind and water strake. The number and exact location of belt gaugings will be subject to OCMI discretion.

- ◊ A Coast Guard marine inspector shall be present during critical portions of the underwater survey process. Critical portions would include, as a minimum:

  - ◊ Examination of critical welds (identified at preparatory meeting), propeller, rudder, other hull appurtenances, sea chests, and sea valves.
  - ◊ Plugging sea chests and removal of sea valves.
  - ◊ Gauging of rudder and tailshaft bearings.
  - ◊ Any other portions identified by the OCMI.

- ◊ Sea valves shall be removed and examined in accordance with the guidance contained in NVIC 1-89. The OCMI must be completely satisfied that sea valves can be removed safely. **Passengers must be removed from the vessel during this evolution**.

- ◊ It must be stressed that this special drydock extension program is an option that the vessel's owner/operator has elected to use. Responsibility for the management of the vessel, its personnel, and maintenance of necessary safety and service systems remains at all times with the master and owner/operator.

- ◊ The vessel owner will provide the OCMI with a detailed examination report including a gauging report, bearing clearances, and a copy of the videotape.

◊ <u>Underwater Inspection Techniques and Equipment</u>.

- ◊ Underwater inspection techniques and equipment shall be in accordance with Section 5 of Encl. (1) to NVIC 1-89.

- ◊ If water visibility will affect the quality of the underwater video, the video camera must incorporate use of a "clear box". A clear box is a device which uses clean, fresh water to displace the surrounding water and provide a clear view for the camera. In order to provide an adequate field of view, the clear box must measure at least 18 inches in diameter (or, if rectangular, at least 18 inches in height and width).

- ◊ As a general rule, modern video and audio equipment shall be used to assure the best quality results.

◊ <u>Internal Structural Examination (ISE) and Integral Fuel Oil Tank Examination</u>.

- ◊ A complete ISE shall be conducted as part of the drydock extension survey. All internal areas of the hull must be accessible for examination.

- ◊ The marine inspector must conduct the entire ISE. The third-party examiner or a suitable representative will accompany the inspector to take additional hull gaugings. The extent of internal gaugings should be limited to that necessary to confirm the information gathered during the underwater survey.

- ◊ Integral Fuel oil tanks shall be examined as required by MSM, Volume II, Chapter 8.B.5. and by 46 CFR 71.53, 115.610, or 176.610 (as applicable).

- ◊ Acceptable Underwater Repairs. The acceptance of underwater repair proposals and the actual repairs will be subject to OCMI discretion. Repairs using underwater welding shall be subject to periodic reevaluation at subsequent inspections. Such repairs shall be completed in accordance with the standards found in the American Welding Society's, "Specifications for Underwater Welding". The OCMI may require immediate drydocking of the vessel if an underwater repair proposal or the actual repairs are considered unsatisfactory.

- ◊ Evaluating Results of the Survey. The OCMI may require drydocking of the vessel at any time if not satisfied with the results of the drydock extension survey.

5. Administrative Procedure. If fully satisfied with results of the survey, the attending marine inspector may recommend a drydock extension of up to 30 months.

   - ◊ The drydock extension policy contained in the Marine Safety Manual, Vol. II, Chapter 8.A.4 shall be followed for administrative purposes. Based on results of the survey, the OCMI may recommend a drydock extension of up to 30 months.

   - ◊ Each completed application and survey, with the OCMI's recommendation, shall be forwarded to Commandant (G-MOC), via District, for action. Commandant (G-MOC) has final approval authority for drydock extensions submitted in accordance with this policy.